Mason (L. D.)



# ALCOHOLIC INSANITY.[1]

BY

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THE relation which alcohol bears to insanity is both causative and contributive. This fact was emphasized in a discussion on "The Influence of Alcohol in the Causation of Insanity," held by the Psychological Section of the British Medical Association at its annual meeting in 1880.

Dr. J. Crichton Browne, President of the Section, in summing up the results of the discussion, and especially certain statistics presented, said: "There were a certain proportion of cases in which intemperance was an expression of a diseased state already established, and had nothing to do with causation; but, on the other hand, there were certainly included in that large mass of cases at the end (of the statistics) in which the causes of the insanity were unknown, a certain proportion in which secret or concealed or unrecognized drinking was really the undiscovered cause."

He offered a physiological explanation of the action of alcohol on the nervous system, maintaining that it first excited and then paralyzed every nerve centre in succession, beginning on the highest and ending on the lowest, and that its action was not simple, but doubly and trebly compound. The highest inhibitory and controlling centres upon which its primary action was exercised could not be repeatedly paralyzed without grave danger to

[1] Read before the "American Association for the Cure of Inebriates," at its Annual Meeting held April 26th, 1883.

mental integrity—to weaken volition was to promote anarchy in mind.

In evidence taken before a select committee of the House of Commons appointed in 1872 "to inquire into the best plan for the control and management of habitual drunkards," the leading lunacy experts of England, Scotland, and Ireland testified that cases of insanity were directly traceable to alcohol; all agreed that, while alcoholic inebriety may precede, usher in, or accompany the various stages of, and not be directly responsible for the insanity, yet there were cases of insanity due directly to the deteriorating influences of alcohol on the nervous centres, having their own special symptomatology as differentiating them from other forms of insanity, and also requiring special treatment. The authorities differ as to the percentage of cases of insanity from alcohol as compared with cases of insanity from other causes, some placing it as low as ten per cent, others as high as nineteen per cent, the average being about fifteen per cent. In an analysis of one thousand cases of insanity from all causes, Dr. Browne found that fifteen per cent were directly due to alcohol. Dr. Edgar Shepherd,[1] of Colney Hatch (an insane retreat in England) is of the opinion that, either directly or indirectly, forty per cent of British insanity springs from intemperance. In a study of six hundred cases of inebriety treated at the Inebriate Asylum, Fort Hamilton, I found that one hundred and sixty-six persons had three hundred and nine attacks of alcoholic mania in some form at various times during their periods of alcoholic addiction. In the annual report of the New York State Lunatic Asylum for 1883, of the four hundred and twelve cases tabulated, in thirty-two, or in a little less than one in thirteen "intemperance" was stated as the exciting cause.

[1] Med. Chirurg. Jour., p. 141.

Without considering in detail all the different conditions or types of insanity with which alcoholism may be associated, suffice it to say that alcoholism can precede or co-exist with most of, if not all, of the various phases of insanity either in a causative or contributive relation, and moreover develops forms peculiarly its own of mental alienation. Much confusion results from the misapplication of the various terms used to describe the different abnormal mental conditions to which alcohol may give rise.

It is therefore our purpose, while alluding simply to the more common, and, therefore, better understood forms, to dwell at length on those conditions of "alcoholic insanity," not so well known, and especially the differential diagnosis of these conditions, and we divide them for convenience of consideration into the acute and chronic forms. The acute are:

1. Acute alcoholic mania, or *mania à potu.*
2. Acute alcoholic delirium, or delirium tremens.
3. Alcoholic epileptiform mania.

The chronic forms are:

1. Chronic alcoholic mania—maniacal type—homicidal tendencies.
2. Chronic alcoholic melancholia—suicidal tendencies.
3. Alcoholic dementia.
4. Dipsomania or oinomania. And, finally, we shall consider "chronic alcoholism," a condition that may co-exist with any type of "alcoholic insanity," and is analogous to forms of chronic poisoning from other substances, as lead, tobacco, etc.

*Acute alcoholic mania.* Mania à potu is a common synonym for this condition. It does not occur in habitual drunkards, but in persons who are not, as a rule, intemperate, yet occasionally drink to excess, as a matter of

their social environments, or it may manifest itself in the periodic inebriate or occasional drunkard. The paroxysm or frenzy is developed in the midst of a debauch, suddenly, without warning. The subjects of such an attack make assaults on those around them; their will-power is dethroned; they are veritable maniacs; they are violently aggressive; their tendencies are markedly homicidal; "retaining sufficient nervous power to wield their limbs, yet not sufficient to guide their reason, they become dangerous alcoholic criminals."[1]

Why some persons can drink to excess, and are not thus affected, and others cannot do so without becoming maniacal, is probably due to the fact that the latter class, either from their natural temperaments or from some cerebral defect, are readily crazed by alcohol or rendered "liquor mad." Indeed, Anstie affirms that in all the cases of this class that he has seen there was a hereditary predisposition to insanity.

The paroxysm or fit of mania usually passes off in a comparatively short time, a few hours at the furthest. In exceptional instances, the person may remain maniacal for four or five days after a drinking bout; but in these cases, as Anstie has shown, there is a condition of alcoholic phrenitis or inflammatory delirium, with marked vascular excitement and high temperature, requiring prompt antiphlogistic measures. The attack passes off by the occurrence of vomiting and copious diaphoresis, and the stage of excitement may be succeeded by one of stupor and prolonged slumber. Finally the alcohol is sufficiently eliminated from his system to permit his normal cerebral cation to be restored. When told of what he has done (for he is unconscious of his acts during the paroxysm), he is usually extremely sorry, ashamed, and repentant. If a periodical inebriate, at some future period he again

[1] Richardson.

becomes intoxicated, and the result is the same, and continues to be so until some accident or illness—the result of his debauch—has a fatal termination, or some criminal act places him in the prison or the asylum, if he is adjudged a proper subject for the latter place.

The following case occurred in my experience. The person was a United States Contractor and at times received large sums of money from the government. He was an occasional inebriate; during the period of his debauches, he was very violent, dangerous to his wife and those about him, making assaults on every one. After the paroxysms of mania passed off, he was repentant, extremely grieved, and did all in his power to amend the evil he had done. After one of his fits of intemperance, in a mood of repentance, he sought to conciliate his wife by the expenditure of a large sum of money. He rented a villa on the Hudson, furnished it extravagantly, bought horses and carriages, and employed a retinue of servants, and in every way strove to make restitution for his past misdeeds. Some time after this—though not a lengthy period—he received a large sum of money from the government, and again went on one of his debauches, returning home a mad man. He procured an ax; his wife fled at his approach and locked herself in a room at the top of the house; the servants escaped to a neighbor's. The maniac had full control of the premises, and proceeded to demolish the furniture. A grand Steinway piano was reduced to splinters, and ruin spread in every direction as his insane fury dictated. Fortunately, he met no one, or homicide would most certainly have been added to his acts of destruction. His wife eventually procured a divorce, and he died in an asylum. His son became an inebriate, and coming under my care, I was enabled to obtain the family history.

The son was a periodical inebriate, and, when under the influence of alcohol, was, like his father, a maniac, ag-

gressive, homicidal, and with exceedingly dangerous and destructive tendencies.

There is no crime in the calendar that these alcoholic maniacs may not commit. Their reason is temporarily dethroned; they are unconscious of not the character of their actions alone, but the acts themselves, and are therefore irresponsible.

One marked characteristic of this form of mania is that it is not preceded or followed by delusions or hallucinations, as other forms of alcoholic insanity are. The assaults are apparently motiveless, the frenzy cyclonic in the shortness of its duration and in its oftentimes terrible results.

The following remarkable case[1] shows the complete annihilation of all mental and moral responsibility. A young man in Madison county, in this State, in the year 1859 was attacked with alcoholic delirium for the third time. While under the attack, he killed his father and mother, cut out their hearts, which he roasted and ate. He was arrested, thrown into prison, and indicted for murder. He was brought into court for trial, where Judge Gray, of the Supreme Court, stated that the case could not be tried, as "there was no motive to prompt a man to commit such a crime." The man was sent to an insane asylum.

Another characteristic of alcoholic mania is that the natural strength of the person may be greatly increased, and a man of ordinary physical development may thus become a giant, in his alcoholic fury, and woe be to those who would stand in his way, or thwart his purpose. His tendencies are not in the more cunning forms of lunacy, nor apparently preceded or guided by any motive—they are aggressive and homicidal.

Imbeciles, harmless when uninfluenced by alcohol, be

[1] Fourth Annual Report of New York State Ineb. Asylum, 1866, Dr. J. Edward Turner, Superintendent.

come most dangerous maniacs when affected by it. But there is no form of mania more dangerous than that which occurs in the epileptic when influenced by alcohol; it matters not whether his epilepsy be directly due to alcohol or to other causes. According to Magnan, he is one of the most dangerous of patients: "he adds to the impulses, sometimes so terrible, to which he is subject from his disease, those which he draws from his intoxication."

We now pass to the consideration of the more common and generally better understood form of alcoholic mental alienation, acute alcoholic delirium, or delirium tremens, the latter synonym being often a misnomer, as tremor is not infrequently absent.

This condition presents itself in one of three forms.

*First*, a simple, uncomplicated, non-febrile form, the patient recovering readily after a few days' illness, with little or no treatment, and after a short period of convalescence resuming his usual occupation.

*Second*, a form similar to that already described, with the exception that the convalescence is slow, delusions persistent, and relapses or recurrences of the attack, at comparatively short intervals, are common. The tendency of this type of delirium tremens is to drift into the more chronic forms of alcoholic mania.

*Third*, a febrile form, with a pulse from 100 to 140, a variable and rising temperature, and other symptoms of a grave nature occurring in rapid sequence, a fatal termination not unfrequently resulting in a few days. This condition is known as "Febrile Delirium Tremens." [1]

The delirium is characterized by hallucinations of sight and hearing, and even those of taste and smell.

Amblyopia, according to Magnan, may exist, and even the chromatic power of the eye, it is asserted by some,

[1] Anstie finds that the tracing of the sphygmograph gives forms of pulse-waves similar to forms of a typhoid type, exhibiting that condition known as dicrotism.

may be affected. Hence the conditions for optical delusions are present, and these are readily misconstrued by a disordered intellect into all kinds of forms and fantasies, horrible or grotesque. There is perversion of the hearing, and natural sounds receive undue importance, and are readily misinterpreted by the delirious patient. There is less perversion of taste and smell than of the other senses; but the fact that the former may be perverted is of interest, as accounting, in some measure, for the delusion of poisoning so common in the more subacute and chronic forms of alcoholic mania.

The delirium is characterized by great changeableness of delusions, although there is one delusion of fixed prominence to which all others are secondary. The perversion of the various senses form, or change, or direct the character of the delusions, which are accompanied by hallucinations of hearing, vision, and tactile sensation. Ordinary sounds receive undue importance, or are converted into terrible threats, the air is full of voices, visions constantly appear and disappear. Commonplace objects assume the form of demons or other horrid objects. Hyperæsthesia of the skin, perverted tactile sensation, gives the belief that bugs are crawling over the integument. Irregular chilly sensation and formication, or pricking sensations, are easily converted by the delirious patient into snakes, rats, or other vermin. The patient borrows his delusions largely from his surroundings, although all authorities agree that the avocation of the patient, or the last prominent act he may have engaged in, establish the central delusion of his delirium.

The actions of patients are often a perfect piece of pantomime; the tailor will thread an imaginary needle, and stitch an imaginary piece of cloth; and so others will follow their ordinary avocations. There is an incessant, monkey-like action; the patient is extremely loquacious,

and continually inspecting his room, or bed-clothing, or the dress of those about him.

If his delusion partakes largely of personal danger, he makes repeated attempts to escape, and often effects his purpose with great cunning.

He will assault those about him in his attempts to get away, or if he imagines they are his enemies. These acts of violence are generally seen in the more maniacal form of delirium. Delusions of a melancholic character are not unfrequently present; preparations are being made for his funeral, the table is a bier, the sheets are his shroud; or he is to be drowned, or hung, or terribly abused in some way; he begs for mercy, he prays for deliverance, and in a paroxysm of terror may commit suicide, if not closely watched.

Finally, either from successful medication or the natural termination of the case, the excessive restlessness—the "busy delirium"—the protracted insomnia give place to sleep. If the case ends favorably, a marked improvement follows, the patient awakes refreshed, although not always free from his delusions, and his convalescence is more or less rapid; or he may pass into a semi-comatose condition, and from thence into complete coma, and finally death; the final issue of the case being largely determined beforehand by the fact whether we are dealing with a case of febrile or non-febrile delirium. It is well to be aware that collapse has occurred suddenly, as the case was in progress, without any premonitory symptoms, a fatal issue resulting rapidly.

I have thus briefly alluded to the more acute forms of alcoholic mania, and more especially dwelling on the mental conditions, that I might more intelligently present and dwell at length upon the more chronic forms of alcoholic mania, and have the advantage which comparison affords.

As far as the clinical history and symptomatology of the

more chronic forms of alcoholic mania are concerned, I will quote the description as given by Maudsley:

"Delirium tremens might be described justly as an acute alcoholism, since there is a chronic alcoholism which is characterized by the slow and gradual development of similar symptoms; in truth a chronic delirium tremens which is called the insanity of alcoholism. Premonitory of it is the same sleeplessness, the same motor restlessness, the same nausea and want of appetite, that go before delirium tremens. Instead, however, of the rapidly rising excitement, the changing hallucinations and delirious incoherence then following, there is great mental disquietude with morbid suspicions or actual delusions of wrong intended or done against him, of wilful provocations and persecutions by neighbors, of thieves about his premises, of unfaithfulness on the part of his wife, and the like; suspicions which are frequently attended with such hallucinations of hearing, of sight, of tactile sensation, as threatening voices heard, insulting gestures or mysterious signs seen, electrical agencies felt. In this state a violent-tempered man, resolved to be even with the scoundrels whom he declares to be persecuting him, sometimes does sad deeds of violence. His hallucinations disappear first in the daytime, being as bad as ever, perhaps, during the night; then they are less vivid at night, being most marked in the stage between sleeping and waking. Next, they are no more than bad dreams or nightmares, and at last they go entirely." The author continues, "unfortunately the recovery seldom lasts, inasmuch as the patient goes back to his indulgence as soon as he can, the chances are that he has other attacks, and that in the end his mind is permanently impaired, his memory is so damaged, perhaps, that it has no more hold of recent impressions than that of one who suffers from senile dementia; his understanding is enfeebled, and even childish; his moral sense is blunted or

destroyed, so that he loses all feeling of moral responsibility, and becomes cunning, cowardly, untruthful, untrustworthy, and his will is so deteriorated, that he has not the least control over himself in respect to indulgence in drink.

"Muscular unsteadiness and trembling go with these signs of increasing mental debility, and there is oftentimes sensory dulness, or actual sensory and motor paralysis of the limbs, on which account he cannot hold firmly with them, perhaps dropping helplessly what he takes in his hands, or lies in bed because he cannot use his legs to walk. . . .

"This condition of mental impairment may be brought about gradually by a steadily continued course of excessive drinking, in some persons, especially women, without any of the hallucinations and delusions of persecutions that go before it in other cases. At a later and worse stage, the patient is completely demented, his mind being thoroughly disorganized, as for example that the most extraordinary scenes occur in his room; that knives and broken glass are coming out of his flesh and skin; that people cut up his body and carry him away at night. The mental deterioration being so great that he resembles not a little in mental symptoms a person who is in the last stages of senile dementia. . . .

"The insanity produced by alcohol is instructive, for it exhibits in more rapid sequence a train of symptoms very like those of ordinary idiopathic insanity, so-called, and exhibits them in a case where we can clearly trace the operation of a cause. We know of a certainty that the alcohol is absorbed into the blood; that it is carried by it to the brain, and that it acts there directly upon the nervous tissues, from which it has been taken in quantity. Its first effect is to stimulate the tissues and cause increase of activity; but in the end it produces degeneration of tissue

and destruction of functions. Let it be noted, too, that it acts equally perniciously upon the different nervous centres, motor, vaso-motor, sensory, and ideational, the collective symptoms of this impartial action giving its peculiar physiognomy to alcoholic insanity."

We have made this extensive quotation, because it is the testimony of an eminent observer on mental diseases and because it is the experience not alone of himself, but of Anstie, Magnan, and other experts in this field of medicine. It coincides also with my experience as far as opportunity has been afforded me to study this form of insanity in our asylum.

The predisposing cause of the more chronic forms of alcoholic mania, or "alcoholic insanity," then is found in the degenerative changes which alcohol has produced in the cerebral nervous and vascular tissues—a degeneration that is the result of a long-continued and excessive use of alcoholic stimulants. I am aware that cases of insanity have been recorded by Tuke, Magnan, and Bucknill, when the first excess in alcohol was followed by insanity lasting for many months, and in some instances years, but it seems to me that in these cases the alcohol must be regarded as contributive, not causative; under such circumstances, simply the exciting cause of a latent condition.

The exciting cause is generally a debauch which ushers in the attack, or the insanity may be developed more insidiously, apparently without any precursory signs; the first manifestations having the peculiar mental symptoms that characterize this condition. If, however, the attack follows a debauch, we have certain symptoms that precede the delusions, insomnia, variable temperature and pulse, poor appetite, restlessness, the general condition of a febrile state; an attack of "acute alcoholic delirium" may now supervene, with the delusions and hallucination which we

have described. As these symptoms subside and the conditions of the patient approaches the normal, we do not have that return to mental health that occurs with reasonable promptitude after a simple attack of delirium tremens; in other words the mental state of the patient does not improve with his physical condition; as a rule, one central delusion remains, around which others of secondary importance cluster. I need not allude to the character of these delusions; they have been already referred to, except that, in addition to the delusions as to persecution, or the monomania of suspicion, we have that of delusions as to locality, the patient imagining that he is in some place other than the asylum, or his place of present abode, also that he visits places or goes to town regularly, whereas he does not leave his house or the asylum.

Chronic alcoholic mania may be divided into two forms. Both are characterized by the monomania of suspicion or of persecution; in one class of cases, the maniacal and homicidal type is presented; in the other, the melancholic and suicidal form.

The former is one of the most dangerous types of mania that is met with, especially when the mental lienation is not ushered in or accompanied by a febrile condition, or other symptoms that usually point out a departure from health. He is therefore not regarded as a sick man by his friends, although they may think he acts a little "queer," he is moody, taciturn, he whispers his suspicions, he picks out his special enemies, he prepares himself against assault, carries weapons on his person, or conceals them in a secret place, he broods over his fancied wrongs; finally, times and place suit his purpose, the revengeful design he has been nursing for months and hinting about to his immediate acquaintances now finds an outlet, and the press publishes a case of "murder in cold blood;" his history by degrees comes out, experts are summoned, his

true condition is ascertained, and he is sent to an asylum. One very common delusion is that of marital unfaithfulness; some one, generally a near acquaintance who is on visiting terms with his family, is selected as the one who has destroyed the sanctity of his hearth and home. Too often his insane delusions are treated as simply jealousy, but it is a morbid jealousy of the most intense character and will in its insane fury take the life of some innocent victim. It is a good rule not to take the homicidal vagaries of an intemperate man as a matter of trifling importance, but when he breathes out, it may be threatening and slaughter, although it may be in an undertone, let him be promptly arrested and examined as to his sanity. Whether the monomania of persecution in alcoholics be developed with or without febrile symptoms, this class of cases is extremely dangerous, and in or out of an asylum must be under constant watch and carefully guarded; their tendencies are homicidal.

Dr. J. C. Lester has furnished me with the notes of the following case:—The patient is forty-three years of age, has been drinking to excess for several years past, became insane; the insanity was the direct result of his excessive use of alcohol, there being no hereditary taint. His grandparents lived to be over ninety years of age. His parents are now living, his father is seventy-nine years old, his mother seventy-five years, and are exemplary people in every respect. His insanity lasted about a year, he recovered sufficiently to resume his business, he remained perfectly sober for several months only to relapse, and is now drinking as hard as ever. The immediate cause of the relapse was a severely sprained ankle, from which he suffered very much. His insanity at all times is that of the monomania of suspicion or persecution. His suspicions are mainly directed towards his wife and child. He walks about the house, and if he had his full liberty would no

doubt assault them, for it was found, before his condition was fully ascertained, that he had concealed, under the stationary wash-stand of the bed-room occupied by himself and his wife, a dirk knife which was covered with some old clothes.

This class of patients show great ingenuity and cunning, combined with secretiveness, in carrying out their designs.

The following case was reported by Dr. Drake, of Cincinnati, Ohio, and was published in the report of New York State Inebriate Asylum, for 1866, Dr. J. E. Turner, superintendent. At the time of the occurrence it attracted the attention of the medical public in its bearings on the legal responsibility of the dipsomaniac.

"John Birdsall, of Harrison, in that State, was indicted, in 1829, for the murder of his wife with an axe, by dividing the spinal column in the neck. He was about fifty years old, and had been married to this, his second wife, about nineteen or twenty years, and had children by her. For some years previous, he had been subject to occasional fits of intoxication. These, of late, were followed by delirium tremens, which generally lasted several days, and went off spontaneously. In these paroxysms, all its physical and moral symptoms were present. He entertained great fears for his safety, and sometimes ran about the village as if attempting to escape from pursuit. At another time, he concealed himself between a feather and straw bed, in his own house. He would point his gun from his window, as if for defense against imaginary persons. He was also very watchful. The prevailing maniacal delusion was, that his wife was in combination with his neighbors—one, his son by his first wife—against his life. He had charged her during his paroxysms with criminal intimacy with these, and had threatened to kill her.

"On Sunday he was intoxicated, Monday, Tuesday, and

Wednesday presented nothing special. On Wednesday evening he complained of being unwell, but seemed to be rational. He slept none that night, and next day the family thought him crazy, but were not alarmed. In the course of it, he took an axe and went to a neighbor, whom he desired to return with him, as he stated they wanted to kill him. He spent the day at home, apparently in terror and agitation; manifested jealousy of his wife; barred the doors; and fancied that the persons of whom he was jealous were manufacturing ropes up-stairs to hang him.

"In the course of the afternoon he suddenly committed the murder. His wife was sitting by the fire, and he had been walking the room. After the fatal blow on the neck, he followed it by two or three on the face. His eldest daughter seized the axe, which he yielded, when he took a scythe and attempted to strike her. She defended herself until the door was opened. When arrested, he acknowledged the homicide, and knew, he said, that he would be hung, but ought to have done it sooner. He talked at this time so rationally that many of the witnesses could not believe him deranged. He evinced no dread of punishment, but was still in great apprehension of those who he had believed intended to kill him. After being committed, he became regular, and expressed sorrow for what he had done.

"On the trial, three medical witnesses agreed that he labored under *mania à potu* when he committed the homicide. For the defense, it was urged that when drunkenness gives rise to insanity it should cause immunity, and hence form a legal excuse. On the other hand, the counsel for the people remarked that Birdsall knew that this delirium followed his intoxication, and hence it was voluntary. The law, therefore, held him accountable for actions during such a state. The verdict was murder in the first degree, and he was sentenced to death."

A case has been under my observation in which during the last thirteen years there have been some twenty-five or thirty attacks of alcoholic mania, more or less protracted. In all of these attacks, the monomania of suspicion was very marked, the main delusion being that his wife was unfaithful to him. In all his attacks of mania he was dangerous to those about him, and had to be kept under restraint. I have no doubt if he had had the opportunity, he would have assaulted his wife. The other form of chronic alcoholic mania is characterized by melancholia. The patient is depressed, weeps readily, to a certain extent he is confidential, seems to crave sympathy. He will follow you about, and ask your aid against supposed evils that are impending over him. I recall one case where the patient believed that his funeral would take place in a few hours. He could hear people preparing for it; he begged me to delay, if possible, the ceremony; he was exceedingly sorrowful and depressed. The delusions are various; persons dead are living, and the living are dead. Events that have happened long since are being re-enacted. Delusions as to locality, as I have said, are often marked. The delusion of poison in the food or drink is oftentimes a very troublesome one. Such persons, however, will take ale or other stimulants when they refuse food, a perversion of taste being the probable cause of this form of delusion we have referred to. This delusion is usually subsidiary to more prominent or leading mental aberrations. The central or prominent delusion is the first to come, the last to leave. As his disordered intellect rights itself, he clings to this oftentimes persistently, and finally, when his reasoning powers return, he listens to argument, and gives up his delusions as a fallacy. It is a curious fact, as in the case we have mentioned, that in subsequent attacks or relapses the

same delusions so prominent in previous attacks return, and remain with the same persistency.

The differential diagnosis between chronic alcoholic mania and the more acute forms of alcoholism, and the idiopathic forms of insanity, or insanity from other causes than alcohol, should exclude delirium tremens, or acute alcoholic delirium, general paresis in its earlier stage, and insanity from syphilis, or traumatism associated with alcoholism.

We have dwelt at length upon the train of mental symptoms in delirium tremens, the great variety and variableness of the delusions, the persistent insomnia, great restlessness, incessant loquacity of the patient, those symptoms best covered and expressed by the term "busy delirium." This, with the comparatively *short duration* of the attack, exhibits a marked contrast to the more chronic form. In alcoholic insanity, sleep will take the place of the "painful vigils" so characteristic of delirium tremens. The monomania of the delusions is characteristic of the more chronic form as compared with the variety and variableness of the more acute forms and the vascular or febrile excitement. He is the subject of delusions, not of delirium—Dr. Skae and others make this distinction.

We have thus drawn the distinction between the characteristic "busy delirium" of delirium tremens and the delusions and less marked vascular excitement of chronic alcoholic mania, because this, with the comparatively short duration of the former and the protracted duration of the latter, constitute the principal features in the differential diagnosis. Cases of general paresis in the incipient stages are not unfrequently characterized by fits of intoxication, and to differentiate this from the condition under consideration, especially if preceded by an alcoholic history, involves some difficulty. However, as pointed out by Anstie and others, the characteristic feature of

"mental exaltation," which marks general paresis and tinctures the delusions, is wanting in simple alcoholic insanity; in the latter instances, depression, with morbid forebodings, or the monomania of suspicion, being the marked peculiarity. In those rare instances of general paresis where mental exaltation is not a feature, the absence of other symptoms that pertain to alcoholism will clear up the diagnosis. Again, alcoholism, with repeated attacks of alcoholic insanity, may eventually terminate in general paresis, and in these cases alcohol may have two important bearings from a medico-legal standing—whether it was causative or simply contributive.

Dr. L. C. Gray informs me that he has found that in the earlier stages of alcoholic paresis the ideas of grandeur, etc., are more logical, the patient giving a reason for his grand ideas, whereas in idiopathic paresis the patient is stupid, dull, and illogical when questioned as to his delusions.

Alcoholism may be associated with insanity from other causes, as syphilis or blows on the head. In the report of cases already alluded to, one case in four had had syphilis, and one case in six had received some form of head injury. In such cases, it will be our duty to determine whether the relation of the alcoholism to the insanity is causative or simply contributive. It is enough for us to know that alcoholic intoxication is not unfrequently the first or initial symptom of an insanity not directly due to alcohol, and thus establish our treatment and qualify our prognosis in a proper way.

In the consideration of the various types of alcoholic mania, it will be necessary to allude at least to dipsomania or oinomania. Magnan refers to it as "a peculiar form of instinctive monomania." It is an irresistible impulse that drives a person to alcoholic intoxication at stated or irregular periods. The attack is preceded by a condition

of melancholia, anorexia, insomnia, and general restlessness. After the debauch, or during it, the special effe c of the alcohol on the mental and physical condition become manifest — tremor, hallucinations, sleeplessness coated tongue, loss of appetite, and other symptoms of gastric derangement. The "irresistible impulse" is the characteristic feature of this special form of monomania. The genesis of that impulse, and the views of various writers as to its pathological origin, the province of this paper will not permit to touch.

The point to be made here is, that the hallucinations and delusions are simply the result of the alcoholic poisoning.

The person again and again yields to the insane impulse until death, either by some intercurrent disease, or disease resulting from his alcoholic excesses, relieves him from his sad heritage.

Chronic alcoholism or chronic alcoholic intoxication is a condition ânalogous to poisoning by other substances, as lead, tobacco, etc. It is thus defined by Magnus Huss: "The name *chronic alcoholism* applies to the collective symptoms of a disordered condition of the mental, motor, and sensory functions of the nervous system, these symptoms assuming a chronic form, and without their being immediately connected with any of these (organic) modifications of the central or peripheric portions of the ner vous system, which may be detected during life or discovered after death by ocular inspection; such symptoms, moreover, affecting individuals who have persisted for a considerable length of time in the abuse of alcoholic liquors."[1]

These symptoms are insomnia, attacks of giddiness, headache, tinnitus aurium; hallucinations, especially of vision, muscæ volitantes; muscular weakness and trem-

[1] Chronic Alcoholic Intoxication (Marcel).

bling, especially in the lower extremities; tremor being marked in the tongue; attacks of dyspnœa, sense of choking or suffocation, due to a spasm of glottis; in cases of profound alcoholic coma, paralysis of the glottis, with complete collapse, has followed, and tracheotomy[1] has been performed to prevent death by suffocation. Hyperæsthesia of integument, formication, pricking or stinging sensations; anæsthesia,[2] especially of lower extremities; delusions may exist, but they are feebler than in delirium tremens, and there is this marked feature, the patient is conscious of his hallucinations and illusions, and admits them, and is not prejudiced by them.

It is important to speak of chronic alcoholism in this connection, because all the effects of chronic poisoning by alcohol may co-exist, in whole or in part, with all the various forms of mental deterioration, in the production of which alcohol is a factor. Having a knowledge of the various symptoms of chronic alcoholism, we can readily distinguish them, and treat them independently of the co-existing mental conditions.

We have thus reviewed the more prominent types of insanity with which alcoholism is associated either in a causative or contributive relation. Our future remarks in reference to the prognosis and treatment will be confined to chronic alcoholic mania.

The prognosis includes the duration of the attack, the possible restoration, or not, of the patient to mental as well as physical health, and the probability of a relapse.

The duration will depend upon the dietetic, hygienic, and medicinal conditions to which we subject the patient. I believe that under improper treatment, and for the want of proper treatment, an attack may be indefinitely pro-

[1] Medico-Chirurgical Transactions, 1837. Geo. Sampson, Esq.—Marcel, Chronic Alcoholic Intoxication.

[2] "Alcoholic Anæsthesia," with cases.—Mason, 1881.

longed, and eventually lapse into incurable insanity. The period, even under favorable conditions, will vary from a few weeks to several months, and Blandford reports a case where two years elapsed before recovery took place. This form of insanity, I believe, has no special period of self-limitation. The tendency to chronicity is very marked, and under unfavorable conditions the insanity may continue indefinitely.

The prognosis as to the final recovery of the patient from his present attack is, as a rule, favorable, more especially if it is not ante-dated by many similar attacks, and it is very surprising and satisfactory how often, in a comparatively short time, the patient may recover his mental as well as physical health under proper treatment.

On the other hand, if there is a history of many similar attacks or periods of insanity, and especially if there is evidence of serious organic changes of the nervous system, the prognosis becomes exceedingly grave, and should the patient survive his present attack, he will probably drift into that form of incurable insanity in which, as Maudsley says, "the mental deterioration is so great that he resembles not a little in mental symptoms a person who is in the last stages of senile dementia."

However favorable our prognosis may be, it should always include the possibility not only, but the great probability of a relapse, so that while we may encourage the friends to look for a recovery in the earlier attacks, our prognosis for the future cannot be favorable. When once insanity has resulted from alcohol, the tendency to relapse is very great; we are dealing with persons whose volition is weakened by previous attacks, and also with every relapse are slowly but surely approaching that inevitable and incurable condition, complete alcoholic dementia; indeed, according to the authorities, this condition in alcoholics may be developed quite suddenly, without pre-

ceding illness, excitement, or sleeplessness, or attacks of acute alcoholic delirium. How many periods of alcoholic mania may precede that which terminates in the incurable form of dementia is not definite; I now have a case under observation for the last thirteen years, during which time the patient has been either in the inebriate or the insane asylum some twenty-five or thirty times, at various periods, for attacks of alcoholic mania. The cause of his dipsomania was a sunstroke; his attacks of drinking came at intervals varying twenty-two days, the shortest, to several months, the longest; all his attacks of dipsomania were followed by alcoholic mania, always more or less chronic, varying from twenty-eight days, the shortest, to sixty-one days, the longest period of duration. He is doing well at the present time, May, 1883, and has not had a relapse for several months.

But our prognosis will not end with our opinion as to the recovery from his present condition or not, nor as to our forecast of his future state. His friends will desire to know what his relation to social and commercial circles should be if he recovers from his present condition, and we should be candid, for upon our opinion may rest most important results, both to the patient and those about him. I think the view of all who have ever had such cases to deal with is not to place them in any position of responsibility or trust, at least not until a long probationary period has passed, because the mere act of so doing would be apt to precipitate them, through mental anxiety and a sense of responsibility they cannot feel equal to, into a relapse. Therefore, should such cases be ever restored sufficiently to again enter commercial or social life, it should be only in a secondary position, more or less under the constant espionage of friends. But even such a case would be an exception to the rule; the majority, the large majority of these cases continue to relapse, until death relieves them

from their hapless condition; or they become ranked among the chronic insane, and are immured the rest of their lives in an asylum.

The *treatment* of alcoholic insanity (we are now considering the more chronic forms) may resolve itself into place of treatment, method of treatment, including proper restraint, medicinal, dietetic, and hygienic measures, and, finally, time of treatment.

As to the first, place of treatment; we have to choose between the home of the patient, the lunatic aylum, or the inebriate asylum; as to the former, we may exclude that as a most improper place, even under the most favorable surroundings. As regards the lunatic asylum, while eminently a proper place as regards treatment, the difficulty would be, while committing the patient as a lunatic, to retain him after his mental condition is recovered, whereas in an inebrate asylum he could be recommitted at the end of a regular period of committal on the ground of habitual or periodical drunkenness, and thus held an indefinite length of time, until all reasonable danger of relapse from too early dismissal from the asylum might result, although completely restored as to his mental condition. In addition to this, a very important advantage, the inebriate asylum has all the advantages that pertain to the insane asylum, as regards restraint, skilled nursing, experienced medical officers.

The method of treatment will include the use of alcoholic stimulants. Whether or not these shall be used will depend much on each individual case; some may be very much benefited by the use of stimulants, and others positively harmed. As a rule, I have found that when stimulants are indicated, the malt liquors are preferable to spirituous liquor. Bass' ale, Guinness' stout, or lager-beer when a milder form is required.[1] The value of the malt

[1] The following is an analysis of the various London ales, by A. N. Church,

liquors, in addition to their greater food properties, is due to their moderately stimulating qualities combined with marked sedative or even hypnotic properties. The quantity as well as the form of the stimulant used, and whether or not it is to be used, each case must determine for itself. The bulk of the malt liquor, or its tendency to produce vomiting or diarrhœa may, in some cases, interdict its use.

As regards diet; nourishing, easily assimilated food must be given, recollecting that, as a class, these patients suffer from mal-nutrition, and that the channels through which we propose to introduce food into the system are oftentimes fitted very improperly to do their work. The gastric and hepatic functions are sluggish and defective, and will require assistance in the form of proper medication and properly prepared food.

It is needless to add that all co-existing diatheses—malarial, syphilitic, or tubercular—should receive the special treatment indicated for such conditions.

Before considering further the various methods of medication, I wish to dwell at length on the use of the bromides and chloral in persons addicted to alcohol, but more especially to the class under consideration. Personally, I believe we have in the bromides a powerful agent for evil as well as good, and I question whether or not (and I wish to lay stress on this point) the too free use of the bromides in large doses in the acute forms of alcoholic

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A.M., professor of chemistry in the Agricultural College, Cirencester. In each imperial pint (20 ozs.) or quart bottle so called:

| | ALCOHOL. OZS. | GRS. |
|---|---|---|
| London Stout | 1. | 74. |
| London Porter | 1. | 10. |
| Pale Ale | 1. | 12. |
| Strong Ale | 2. | 18. |

The above analysis appears in the South Kensington Science Book, and is quoted by Charles R. Francis, M.B., in an article published in the London Medical Temperance Journal for April, 1883.

mania may not, while it modifies the acute symptoms, bring about or direct the patient into the more chronic forms of alcoholic insanity. As to the mental effect of so-called "late bromization," or bromism, we know that large and repeated doses of the bromides are very depressing, producing temporary loss of speech, blindness, loss of muscular power and co-ordination; inability, therefore, to stand or walk. In fact, by an injudicious use of the drug we can reduce a person to the condition of a slobbering dement. Ribot[1] reports the case of a clergyman who took the bromides in free doses for insomnia, the result being he lost his memory completely; this faculty, however, returned when the drug was suspended. A late writer says: "There is no question that cases of bromization are now and then mistaken for insanity."

Now if the symptoms as stated have been the direct result of experiment on strong healthy persons, and we are so informed, what could be rationally expected the effect would be on the nervous system of the alcoholic, broken down by disease and dissipation?

It is well to be aware that bromism produces a species of insanity in order that we may intelligently consider such a result as probable in the case before us. As regards hydrate of chloral, I am glad to say that while I witnessed its birth into the therapeutic world, I have also witnessed the gradual retraction of this powerful and uncertain drug into a more limited sphere. If used at all in cases of alcoholism, let it be used in the smallest possible dose that will answer, and with the greatest circumspection, lest we produce cardiac paralysis in a heart already enfeebled by fatty degeneration. Besides its oftentimes direct and lethal action on the organ of circulation, we should not forget its peculiar effect on the mind, due to its degenerative action

[1] Ribot: Diseases of Memory.

on the nervous system when given even in moderate doses for a long period—a train of mental symptoms that is involved in that condition known as the chloral habit. Occasionally we see this condition associated with alcoholism.

But while we may lay aside, at least after the more acute symptoms have subsided, these two remedies in the treatment of alcoholic insanity, we can find not only safe but efficient substitutes well adapted for the anæmic condition of the more chronic forms. In the judicious use of ale or stout we can oftentimes procure a safe slumber for a patient, to which, in some cases of extreme restlessness, a few minims of morphine with digitalis may be added.

Zinc in some form, especially the oxide of zinc, has been shown to be of great value in chronic alcoholism, and has proved useful in my hands in chronic alcoholic mania. It is a safe and efficient sedative to the arterial and nervous systems, also to the gastric mucous membrane in moderate doses; it has tonic as well as hypnotic properties, and is almost a specific, as has been said, in certain forms of chronic alcoholism. According to Marcet, who first called attention to its value in chronic alcoholism, the dose will vary from two to four or even six grains twice a day, suspended in mucilage of gum acacia and given after eating; being tasteless, it is readily taken by the patient and can be mixed with his solid or fluid nourishment. It is a curious fact that chronic poisoning from oxide of zinc resembles in its symptoms the features of chronic alcoholism. Anstie has not found the drug of as much value as reputed. It certainly is not successful in all cases, nor at all stages of any one case, but I believe much depends upon the time at which we use it. We should select for its exhibition the time when the malady has developed some tendency towards chronicity rather than at the inception of an attack. We have also at our command remedies that act directly

upon the vaso-motor system and thus indirectly upon the cerebral circulation.

Tincture nuc. vomicæ or strychnine [1] and fluid ext. ergot, these, by their tonic and contractile effects upon the arterioles and capillaries of the brain, tend to overcome that passive stasis due to vaso-motor paralysis that some writers regard as the pathological condition of the cerebrum in this state.

Tinct. of digitalis or the infusion in moderate doses sufficient to regulate the heart's action does much to establish a better cerebral circulation and is much safer than other forms of cardiac sedatives.

As the patient passes towards convalescence, the various nerve tonics, in the form of strychnine, iron, phosphorus, and the vegetable bitter tonics may be exhibited with advantage.

As soon as possible, out-door exercise should be permitted, and, under the care of a nurse, the patient should walk a certain time in the open air, a favorable day being chosen. Private grounds or a park should be selected, as the exposure of the patient to any unpleasant sight or sound in his yet weakened mental state may temporarily, if not permanently, prove injurious. Walking is preferable to carriage exercise, although the latter might be occasionally resorted to as the patient's mental state improves. From the first, all unnecessary restraint should be withdrawn. At the same time, great care should be exercised to keep the patient under constant espionage. He may yield suddenly, at a most unexpected moment, to a homicidal or suicidal impulse, and inflict injury upon others or himself.

Under certain conditions, restraint in some form is imperatively demanded. When this is the case, such a

[1] Dr. A. Luton, Prof. of the School of Medicine at Reims, has written a valuable monograph on the therapy of strychnine in alcoholism.

patient is best confined in a room of sufficient size to permit his walking about. It should be well heated in winter, and well ventilated at all times. There should not be any bedstead or other furniture or anything that the patient could hang himself to or injure himself with. We have such rooms in our asylum. These rooms are well-ventilated, and lighted by top-lights. The heating, lighting, and ventilation are all arranged with a view to the safety of the patient. The door is of extra strength, and has a small opening or window through which the patient can be constantly watched and food and drink passed. In such a room as this, the patient can have full liberty, and neither his suicidal nor homicidal tendencies can exert themselves. This method is far better, and not accompanied by those dangers to the patient, which not infrequently result from manual or mechanical restraint.

With the first returning glimpses of mental health, or as soon as it is safe to do so, the plan of regular exercise in the grounds of the asylum should be commenced, and systematically carried out. This has been already referred to. The patient should not see his friends until in full possession of his mental faculties, or, at least, sufficiently so as not to be injured by their visits too often; the tendency is to subject the yet hardly balanced mind to a trial it is not fitted for. Friends call, and stay too long; later on he may be visited by his legal adviser, or some business matters may be submitted to him. A period of exacerbation or excitement follows, and our patient, by an injudicious act, in twenty-four hours is back where he was weeks before, and probably permanently so.

A case of this kind occurred in my experience. The patient had suffered from the chronic form of alcoholic mania for some months, but after complete recovery and some weeks of convalescence, he was apparently restored to health, and was assigned to duty as an assistant

in the hospital department of our asylum. He was faithful and efficient. After being on duty a few weeks, he was allowed to assist in the case of a delirious patient. The effect was most disastrous—a relapse followed. For a year thereafter, he remained under my observation in the asylum, mentally unsound, and eventually was removed to an asylum for the insane. Do not make this mistake, and subject your patient too early to scenes of excitement. From what I have said, it is hardly necessary to add that a drinking bout, or even that which might in a healthy person be regarded as a moderate use of alcohol, will undoubtedly bring on a relapse.

But the duration of the treatment is of no less importance than the place and method of treatment. The time over which we should extend our treatment should not alone be until we have effected more or less complete mental restoration and the proportionate degree of physical health that necessarily must accompany it. But there should be a period of convalescence—a test or probationary period, so to speak. The patient should be under little, if any, restraint; nevertheless, proper espionage should be continued. By this time, medication will have been gradually withdrawn. The diet must be nourishing and generous; habits of regular out-door exercise insisted upon. Mental occupation, as well as amusement, must occupy some portion of the daily routine of life. He must have all reasonable liberty and the companionship of proper persons.

The mental condition of our patient is not what it was; it is now such that he can appreciate and be both influenced and elevated by moral and intellectual surroundings. By degrees, he is thus prepared to be reinstated in society. To plunge such a person into the vortex of commercial or social life would be to cause a relapse. The retirement to the quietude of a rural life for a few

months after the patient has left the care of his physician will do much to strengthen the mental and physical condition as yet unfitted for active duty.

The duration of the period of treatment, if we include the time of convalescence, would vary from six months to one year, but there can be no fixed limits, each case must determine that for itself; too much importance cannot be given to the period of convalescence or probationary period.

But we should neglect a very important part of the after-treatment of these cases, if we did not speak of the future occupation of our patient; change of business may be actually necessary, from sedentary in-door life to out-door life. The employment should be congenial to and suited to the capabilities of our patient. Want of occupation, where the patient is capable of being employed, would have an injurious effect.

When repeated relapses occur in spite of the most judicious treatment, then such a patient must be committed to the Inebriate Asylum and remain there indefinitely, or he will most assuredly become permanently insane.

From the consideration of the various phases of insanity to which inebriety may give rise or with which it may be connected we cannot but come to the conclusion that the average inebriate, if not all inebriates, are on the line which divides sanity from insanity. Some have not yet crossed the line, a certain proportion have crossed and recrossed this line, oscillating between periods of sanity and insanity, while not a few have passed over on the side of insanity and permanently so.

When we further consider the intimate relation that exists between inebriety and insanity, how in family histories we see inebriety in one member, insanity in another, and the tendency of the former to lapse into the latter as already stated, we must regard the inebriate, whether

periodical or habitual, as one whose mind, to say the least, is unbalanced, as a person who is on the verge of one of the many phases of insanity with which alcoholism may be associated. If this is the case, and we do not think regarding the inebriate in this light we are acting contrary to sound judgment, certainly not if we are guided by prudential motives, what practical deduction may we derive from such a view? We find the inebriate defective in will-power, his reason and judgment to a greater or less degree suspended, certainly while under the influence of his potations and for some time thereafter. His motives, if he can be said to have any motives, originated by a brain whose cerebration is defective, and the moral faculties, uninfluenced by proper intellection, either annulled or greatly impaired. We ask what position should such a person hold either in society or in business relations?

The question also naturally arises if the mental condition of the inebriate is more or less defective. How can we hold him responsible for his acts? He will lie, he will steal, he will commit forgery, there is no crime in the criminal calendar that he may not sooner or later commit. Shall we associate him with his act in a punitive relation? But if we assert a prior condition of mental deterioration, how can we hold him responsible for the deed?

It seems to me that the responsibility cannot rest on the inebriate, but upon the unfortunate customs of society and insufficient application of legal measures that permit him to be at large.

We believe, however, that better days are in store for the inebriate. The period of the policeman's club and ten dollars or ten days is rapidly giving way to a more enlightened sentiment, and society will not suffer the inebriate to injure himself or transgress its own code of law

and morals repeatedly as it has in the past, but place him under prompt and humane care, and if possible recover him from his diseased condition.

Much misery and expense will be avoided if the correct theory concerning the true status of the inebriate is accepted, and the proper stand-points from which he should be viewed we have endeavored to set forth in this paper.